REMARKS

Claims 1-30 are pending in the present application. Independent claim 1 and claims 2-11 and 19-23 dependent directly or indirectly on claim 1 are directed to a polarizing element. Independent claim 12 is directed to a liquid crystal display. Independent claim 13 and claims 14-18 and 24-25 dependent directly or indirectly on claim 13 are directed to a method of manufacturing a polarizing element.

As a preliminary, Applicants and Applicants' representative thank the Examiner for the personal interview which was held on July 27, 2004.

In the Office Action dated May 24, 2004, claims 1, 8, 11-14 and 16 remain rejected under 35 U.S.C. 102(b) as anticipated by US 5,825,542 to Cobb, Jr. et al. (Cobb), claims 1-8, 11-16 and 19-25 remain rejected under 35 U.S.C. 103(a) as obvious over US 5,999,243 to Kameyama et al. (Kameyama) in view of Cobb, claims 9 and 17 remain rejected under 35 U.S.C. 103(a) as obvious over Kameyama and Cobb, further in view of US 5,880,800 to Mikura et al. (Mikura), and claims 10 and 18 remain rejected under 35 U.S.C. 103(a) as obvious over Kameyama and Cobb, further in view of US 6,288,172 to Goetz et al. (Goetz).

It is maintained in the Office Action that Cobb discloses the combination reflective polarizer layer + diffusing adhesive layer to improve coloring, and Kameyama discloses a cholesteric reflective polarizer with retarder layer in a display, so that it would have been obvious to use the diffusing adhesive layer of Cobb in the display of Kameyama.

The rejections are again respectfully but forcefully traversed. As explained in the response to the previous Office Action and during the personal interview, the reflective polarizer used in Cobb is a specific multilayer linear polarizer, and Cobb is completely silent regarding other types

of reflective polarizer. In particular, Cobb is completely silent regarding a circularly-polarized light separation plate. Thus, a person of the art would not have had any motivation to modify Kameyama by referring to Cobb, and even if, arguendo, a person of ordinary skill in the art had attempted to combine Kameyama and Cobb, that person would have found no motivation or suggestion in Cobb regarding circular reflective polarizers.

Specifically, the assertion in the Office Action that "Cobb is evidence that ordinary workers in the art would find a reason, suggestion or motivation to use a polarizing element that includes a light-diffusion pressure-sensitive adhesive layer" is respectfully traversed.

It is correct that the problem addressed in Cobb, generally stated, is that "there is a need in the art for polarizers and reflectors which are more efficient, have higher reflectivity and better performance, and are thus able to contribute to enhanced display efficiency, brightness and contrast" (Cobb at col. 1, lines 44-47). However, the introduction explains that in fact, Cobb is designed to remedy the narrower problem of "absorption by the dichroic polarizers" (col. 1, lines 34-35), as well as by "the reflector placed behind the backlight assembly (Cobb at col. 1, lines 37-38). There is no indication in Cobb that its invention is intended to extend indiscriminately to any type of polarizers.

Further, the teaching of Cobb in its most general form, i.e., by reference to the Summary section, is only that "[h]ighly efficient diffusely reflecting multilayer polarizers diffusely reflects [sic] light of one polarization while diffusely transmitting the other polarization... The diffusely reflecting polarizer includes a light diffusing element and a multilayer reflective polarizing element" (Cobb at col. 1, lines 51-55). The rest of the description makes clear that the "multilayer reflective polarizing element" defined in the Summary is a particular linear polarizer. Specifically,

after describing in details the diffusing element (see Cobb from col. 2, line 25 to col. 4, line 16), Cobb starts the description of the reflective polarizer by the following statement:

> The diffusely reflective mirrors and polarizers described herein rely on the **unique and advantageous properties of multilayer optical films**.

Cobb at col. 4, lines 18-20 (emphasis added). The grammatical structure of this sentence ("described herein" does not refer to a specific embodiment but to the detailed description of "the invention" in general, cf. Cobb at col. 2, line 8), as well as the use of the term "unique... properties," make clear that the invention does not relate to any type of "reflective polarizer," but to the specific "unique and advantageous" multilayer film disclosed in the Summary section of Cobb.

This teaching is confirmed in a subsequent paragraph of Cobb:

> Multilayer optical films constructed **according to the present invention** exhibit a Brewster angle (the angle at which reflectance goes to zero for light incident at any of the layer interfaces) which is very large or is nonexistent. In contrast, known multilayer polymer films exhibit relatively small Brewster angles at layer interfaces, resulting in transmission of light and/or undesirable iridescence. The multilayer optical films according to the present invention, however, allow for the construction of mirrors and polarizers whose reflectivity for p polarized light decrease slowly with angle of incidence, are independent of angle of incidence, or increase with angle of incidence away from the normal. As a result, multilayer stacks having **high reflectivity for both s and p polarized light** over a wide bandwidth, and over a wide range of angles can be achieved.

Cobb from col. 4, line 56 to col. 5, line 3 (emphasis added). Like the passage at col. 2, lines 18-21 of Cobb, this passage is intended to qualify, not a specific embodiment, but "the present invention" of Cobb. The first two sentences of this passage explain that the "multilayer optical film" of Cobb is different from other "multilayer polymer films," i.e., these two first sentences confirm that the

teaching of Cobb relates, not to reflective polarizers in general, but to a subset of "multilayer" reflective polarizers. The third and fourth sentences of this passage set forth the essential characteristics of the multilayer film of Cobb, and in doing so, they confirm that the "multilayer optical films according to the present invention" of Cobb separate incident light in "p polarized light" and "s polarized light," i.e., they are linear reflective polarizers.

The rest of the description of Cobb focuses on particular embodiments and examples of the multilayer film, all of which have linear polarization properties. There is not a single example in the whole description of Cobb showing the use of a non-linear polarizer, and not a single mention, suggestion or allusion that the polarization might be anything other than linear polarization, or that the reflective polarizer might be anything other than a linear reflective polarizer.

In summary, upon studying the Cobb reference, and in particular the passages reproduced above, a person of ordinary skill in the art would find in Cobb, not an indiscriminate teaching to use "a polarizing element that includes a light-diffusion pressure-sensitive adhesive layer," but a much narrower teaching to use the "unique and advantageous" linear multilayer reflective polarizer, in combination with the diffusing film, as described in Cobb. Therefore, that person would not find in Cobb any teaching or suggestion regarding an optical construction including a circular reflective polarizer.

Turning to Kameyama, this reference focuses on a display comprising a circularly-polarized light separation plate, but completely fails to disclose a diffusing layer to compensate color changes (in this respect, the first sentence of the last paragraph on page 7 of the response filed on March 3, 2004 should have been corrected to read "Further, Kameyama also fails to teach or suggest using a reflective polarizer comprising a ~~circularly-polarized light separation~~

~~plate~~ diffusing layer to compensate color changes." Applicants' representative apologizes for the error). Specifically, Kameyama explains in the introduction that a retardation layer is used in displays comprising a circularly polarized light separation layer (Kameyama at col. 1, lines 21-25) but that "retardation characteristics in a three-dimensional direction including in-plane and thickness direction is related in a retardation film for compensation, and reflection characteristics including circular dichroism (wavelength region for selective reflection) is related in a circularly polarized light separation layer" (Kameyama at col. 1, lines 34-39), so that "display unevenness such as coloration has developed in visual perception from slant direction" (Kameyama at col. 1, lines 46-47).

The solution offered in Kameyama is to provide a "liquid crystal element comprising an oriented layer of a liquid crystal polymer" (Kameyama at col. 1, lines 62-63) having specific haze properties as defined in the Summary section of Kameyama. There is no mention of a diffusing film in relation with improving display unevenness or brightness.

It is noted that, at the end of the description, Kameyama discloses generally that "an appropriate optical layer such as, e.g., a light-diffusing plate may be disposed in an appropriate position, e.g., on a surface thereof or between layers" (Kameyama at col. 13, lines 49-52). However, no further guidance is provided as to the nature and location of the "light-diffusing plate," except that Figure 6 shows an embodiment with a light-diffusing plate 71 in front of the liquid crystal cell and behind the front polarizer, and Kameyama specifies that "a light-diffusing plate... may be disposed over the polarizing plate disposed on the side form which the liquid crystal display is viewed" (Kameyama at col. 14, lines 9-13). Moreover, no guidance is provided as to a connection between a light-diffusing plate and any reduction in light unevenness.

In summary, a person of ordinary skill in the art would find in Kameyama a teaching regarding "liquid crystal elements" that may be helpful in reducing display unevenness due to coloration at slant angles, but that person would find (i) no teaching or suggestion regarding any specific relationship between Kameyama's objective of reducing display unevenness and the use of a diffusing film, and (ii) no teaching or suggestion regarding any specific cooperation between the circularly-polarized light separation plate of Kameyama and a diffusing film for another purpose, other than a general declaration regarding light-diffusion plates that focuses on diffusion on the display side.

In view of the above, if a person of ordinary skill in the art had attempted to improve on the display of Kameyama so as to further reduce color unevenness, that person would have no incentive to refer to Cobb, for the double reason that (i) Cobb does not relate to the problem of color unevenness at slant viewing angles, but to the problem of light absorption and brightness reduction, and (ii) Cobb does not relate to circular reflective polarizers, but to a specific multilayer linear polarizer.

Further, even if a person of ordinary skill in the art had attempted to extract a teaching from Cobb that might relate to Kameyama, that person would have found no indication in Cobb as to (i) whether the diffusing film of Cobb might be helpful in reducing color unevenness, or (ii) whether the diffusing film of Cobb might be combined with a reflective polarizer other than the "unique" multilayer linear polarizer described in Cobb, so that any such attempt at combining Kameyama with Cobb would have failed.

Reference is made to the Manual of Patent Examining Procedure (MPEP) § 2143 which states:

> To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See MPEP § 2143 - § 2143.03 for decisions pertinent to each of these criteria. (Emphasis added.)

MPEP § 2143 also states:

> The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990).

Here, Kameyama does not provide any suggestion or motivation to use a diffusing film to improve coloring in relation with a circular reflective polarizer, and Cobb does not provide any motivation to provide its diffusing film with a circular reflective polarizer, and does not provide any guidance as to whether such combination might be successful in improving the optical properties of an image display. As a result, modifying Kameyama by reference to Cobb could not have been obvious, except in hindsight.

In contrast, the present inventors have determined that color unevenness at slant viewing angles in a display can be markedly improved by providing a polarizing element with a reflective polarizing plate comprising a circularly-polarized light separation plate and a light-diffusion pressure-sensitive adhesive layer provided to the reflective polarizing plate, as recited in present claims 1, 12 and 13. Such combination of features and its advantages are not taught or suggested in any of Kameyama or Cobb, and the other cited references fail to remedy these deficiencies of

Cobb and Kameyama. Therefore, the present claims are not obvious over the cited references taken alone or in any combination.

In addition, the combination of features as recited in the dependent claims are not taught or suggested by any of Kameyama or Cobb, in particular a diffusive adhesive layer interposed between the circularly-polarized light separation plate and the quarterwave plate, as recited in present claims 7 and 28, a diffusive adhesive layer disposed directly on the circularly-polarized light separation plate as recited in claims 27 and 30, respectively, and at least one other adhesive layer which is not a light diffusion pressure-sensitive adhesive layer, as recited in claims 26 and 29, and the other cited references fail to remedy these deficiencies of Cobb and Kameyama. Therefore, for these reasons alone, the dependent claims are not obvious over the cited references taken alone or in any combination.

In view of the above, it is submitted that the rejections should be withdrawn.

In conclusion, the invention as presently claimed is patentable. It is believed that the claims are in allowable condition and a notice to that effect is earnestly requested.

In the event there is, in the Examiner's opinion, any outstanding issue and such issue may be resolved by means of a telephone interview, the Examiner is respectfully requested to contact the undersigned attorney at the telephone number listed below.

In the event this paper is not considered to be timely filed, the Applicants hereby petition for an appropriate extension of the response period. Please charge the fee for such extension and any other fees which may be required to our Deposit Account No. 50-2866.

Respectfully submitted,

WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP

Nicolas E. Seckel
Attorney for Applicants
Reg. No. 44,373

Atty. Docket No. 020587
Customer No.: 38834
1250 Connecticut Avenue NW Suite 700
Washington, D.C. 20036
Tel: (202) 822-1100
Fax: (202) 822-1111
NES:rep